

ATTACHMENT A REMARKS

Considering the matters raised in the Office Action in the same order as raised, and turning first to the requirement for restriction, applicant disagrees with the decision of the Examiner in maintaining the restriction requirement, at least for the reasons set forth in the last response.

Turning to the objection to the disclosure, the Examiner is, of course, correct in objecting to the description in paragraph [0031] and the typographical error has thus been corrected. The Examiner is thanked for pointing out this error.

Claims 1-5 and 15-21 have been rejected under 35 USC 103(a) as being unpatentable over Simon et al (US 6,570,486) ("Simon") in view of Smith (US 5,349,329) ("Smith").

Simon discloses a passive remote access control system wherein access to a motor vehicle is controlled by periodically transmitting an interrogation system from a control circuit on the vehicle. Upon receiving the interrogation signal, a handheld remote control device transmits a reply signal to the control circuit. The control circuit "measures the strength of the reply signal and activates a first function, such as unlocking a door of the vehicle, when the strength exceeds a first threshold level and, thereafter, when the signal strength exceeds a second threshold level, the control circuit activates a second function, for example enabling the engine to be started" (see the Abstract). Generally speaking, the Simon system is basically a remote door locking and unlocking system of the type in common use (and such as has been around since as early as the 1950s) although the system does also enable the engine to be started when, as indicated above, the signal strength of the reply signal exceeds a second threshold. This enabling of engine starting is, of course, the opposite of disabling the engine when the reply signal is less than a threshold level, and, in this regard, the basic purpose or function of the Simon system are completely different from that of the present invention, wherein a key purpose is to disable a vehicle when the distance between a user-carried transmitter and the vehicle is greater than a predetermined distance.

The Examiner recognizes some of the shortcomings of Simon as a reference against the claims and, in this regard, states that Simon "does not explicitly disclose allowing the user to wear the transmitter, controlling continued operation of the vehicle, and the control unit that calculates the distance between the first and second control devices for disabling vehicle when the distance is greater than a predetermined distance." It is respectfully submitted that not only does Simon not disclose these features but also that these are core features of the present invention which distinguish the invention from remote door control systems such as that of Simon.

Considering the latter point in more detail, it is respectfully submitted that one of ordinary skill in the art would not look to a patent which deals with controlling locking and unlocking of a vehicle for a solution to problems associated with systems for preventing "car-jacking," or other unauthorized use of a vehicle, when the vehicle is in operation. Moreover, enabling the engine of a vehicle when, e.g., the driver gets into the vehicle (so that the signal strength of the reply signal exceeds the "second threshold level" referred to above) is a much different thing from disabling a car-jacked vehicle. As indicated above, the teachings of Simon are akin to those involving simple remote car door locking and unlocking which are in common use, and are not analogous to systems for disabling the continued operation of a vehicle after the vehicle has been started and is being operated by an unauthorized user.

Further, applicant respectfully disagrees with the contention that "adapting the transmitter in a specific shape wearable to a person would have been well known and obvious matter of design choice." In this regard, the obvious form of the transmitter in Simon is that which is already in common use, i.e., a small handheld unit which is normally adapted to carry the keys for the vehicle as well. Such units are not wearable and are not adapted to be worn by a user because of the presence of the keys and because of the need to operate by hand the various associated controls ("lock," "unlock," "trunk latch" and the like), whereas, with the truly passive system of the present invention, wherein no such controls are necessary, the unit can readily be adapted to being worn on the person of the user.

Turning to the Smith patent, the Smith patent discloses a vehicle security apparatus and method designed to prevent "car-jacking." The apparatus includes "a

transmitter carried by the driver, a receiver and switch circuit installed in the vehicle such that, when the receiver fails to receive the signal broadcast by the transmitter, the switch circuit disables the vehicle for operation" (see the Abstract). An "event detector, such as a switch circuit connected to the door light switch circuit of the vehicle, may be used to arm the disable circuit for a selected period so that disablement occurs only when the transmitter and receiver are separated beyond their communication range during a defined time interval following the occurrence [sic] of the event" (see the Abstract).

It is noted that there are a number of important differences between the present invention and the apparatus of the Smith patent. For example, Smith employs a simple transmitter and receiver and, as indicated above, provides for disabling of the vehicle when the receiver, which is installed in the vehicle, fails to detect the signal broadcast by the transmitter. This contrasts with the present invention wherein both the first electronic control device adapted to be mounted in the vehicle, and the second electronic control device adapted to be worn by authorized persons, include transmitter/receivers, in contrast to Smith wherein the driver carries the transmitter and the receiver is installed in the vehicle. Further, as indicated above, Smith provides for an event detector such as door open detector (denoted 32 of Figure 1) in arming the disabling circuit.

In addition, in contrast to the present invention as claimed in claim 17 as amended, the Smith patent, like the Simon patent, does not actually "calculate the difference between the first and second control devices based on the return signal to produce a calculated distance, compare the calculated distance with a predetermined distance and disable the vehicle when the calculated distance is greater than the predetermined distance." Both the Smith and Simon systems rely on a determination of signal strength in their operation and while Smith, for example, refers to distance d' in Figure 9, the Smith patent makes it clear that what is being measured is the number of lost pulses after a selected interval (see the first full paragraph of column 12) and that there is no actual calculation of the separation distance.

Further, and more generally, it is respectfully submitted that the combination of the Smith and Simon patents is necessarily the improper product of hindsight. The

Examiner contends that it "would have been obvious to a person of ordinary skill in the art at the time the invention was made to disable the vehicle taught by Simon when the distance between the user and the vehicle is larger than a predetermined distance as taught by Smith in order to prevent hi-jacking situation in which the user is pushed away from the vehicle." However, as indicated above, the references actually deal with two entirely different situations, i.e., (i) remote control of door locks and starting the engine when the driver enters the vehicle, as compared with (ii) disabling a vehicle that has already been started and is in continued operation. In this regard, the anti-theft apparatus of Smith would be a complete add on to the existing Simon door-lock control system rather than an enhancement of the door-lock control system. Thus, while it is respectfully submitted that such a combination would not be obvious, if the references were somehow to be combined, the resultant combination would be one wherein the Smith apparatus was separately incorporated in the Simon system and thus one that would suffer the very disadvantages discussed above with respect to the Smith patent. For example, based on the Smith teachings, the system would simply use a user carried transmitter and a vehicle mounted receiver as taught by Smith wherein it is failure to detect the transmitted signal that produces vehicle disablement, in contrast to the present invention wherein transceivers (transmitter/receivers) are used in both the first and second electronic control devices and wherein vehicle disablement is effected based on a returned signal, which is produced by the transceiver of the second device in response to a characteristic signal transmitted by the transceiver of the first device, and which is received by the transceiver of the first device and processed by a control circuit of the first device.

Turning to the dependent claims, these claims are patentable for at least the reasons set forth above in support of the claims parent thereto. Moreover, a number of these claims set forth separately patentable features not disclosed by the references. For example, applicant disagrees with the contention by the Examiner that the subject matter of claims 20 and 21 is taught, by or obvious from, the teachings of either of the references.

Allowance of the application in its present form is respectfully solicited.

END REMARKS